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## REMARKS

Upon entry of this amendment, claims 22-39, 48-52 remain in the application. Claims 1-21 and 40-47 have been withdrawn from consideration by a previous action. The Office Action of June 24, 2003 has been received and carefully considered. In response thereto, this amendment is submitted. It is submitted that, by this amendment, all bases of rejection and objection are traversed and overcome. Reconsideration is, therefore, respectfully requested.

The present amendment is submitted under the provisions of 37 C.F.R. 1.116. It is submitted that this Amendment seeks to place the Application in a condition suitable for allowance by addressing issues raised by the Examiner in the previous Office Action. In the alternative, it is submitted that this Amendment seeks to address and remove issues which would require consideration on appeal should agreement on allowability not be reached. Entry of this Amendment under the provisions of 37 C.F.R. 1.116 is respectfully requested.

Claims 22 and 30 have been objected to for various informalities noted by the Examiner. Claims 22 and 30 have been amended by this action to address these informalities.

Claim 52 currently stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 52 has been amended by this action. It is submitted that, by this action, claim 52 now particularly points out and distinctly claims the subject matter which the applicant regards as the invention.

Claims 22-39, and presumably claims 48, 50, and 57 currently stand rejected under 35 U.S.C. § 102(e) as being anticipated by Liff (U.S. Patent No. 6,471,089). The Examiner indicates that the Liff reference discloses the drug dispensing system as described in claims 22, 31, 32, and 36 to include a controller (314), a reservoir of pharmaceutical (20) to be dispensed over time to a patient, the pharmaceutical including at least one of tablets, liquids, or gasses, to be administered in individual or

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discrete doses according to a treatment regimen (See column 1, last line, and column 2, lines 1-7 for "dispensing a pharmaceutical over time," and column 8, lines 16-20, for liquids and other forms of drugs being dispensed. See also column 2, lines 52-54, which indicate that each bottle contains a certain number of doses, which the Examiner construes as including one dose or several doses). The Examiner indicates that the system also includes a drug delivery mechanism (see references 5-6C) and a data network interface coupled to the controller (see Figure 13A). With regard to claims 23, 24, 31-34, 37, 38, and 39, the Examiner indicates that the Liff reference discloses sending messages to and from a health care service provider or drug supplier (see Figures 14T, for example), noting payers, doctors, inventory and refills having files for information pertaining thereto. The Examiner indicates that data messages identifying the patient and the identity of the particular drug are also disclosed in the Liff reference (see Figure 14K) for example. Pertaining to claim 25, the Examiner indicates that the Liff reference discloses a human/display interface (see Figures 14A-14T). Pertaining to claims 26, 27, and 35, the Examiner indicates that the Liff reference discloses effecting payment for the provision of health care service or for a drug (see column 18, lines 14-17). Pertaining to claim 28, the Examiner indicates that the Liff reference discloses that the message is transported over the Internet (see Figure 18). Pertaining to claim 29, the Examiner indicates that the Liff reference teaches that the message is transported via wireless (see column 8, line 24). Pertaining to claim 30, the Examiner indicates that the Liff reference discloses a pharmaceutical level detector (182) (see Figure 7C).

With regard to claim 48, the Examiner points to column 8, lines 16-20 as teaching one liquid material. With regard to claim 50, the Examiner indicates that claim 50 states that a memory is connected to the computer system. With regard to claim 51, the Examiner indicates that claim 50, column 18, lines 42-65 are anticipatory.

Claim 22 currently stands rejected under 35 U.S.C. § 102(e) as being anticipated by Liff. Claim 22 has been amended by this action to more particularly set forth the applicants' invention. The applicants' invention as set forth in claim 22, as amended, is directed to an intelligent drug dispensing appliance which includes a controller and a reservoir of pharmaceutical to be dispensed over time to an individual patient. The

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pharmaceutical includes at least one of individual tablets, liquids, gasses, to be administered to an individual patient in individual doses according to a treatment regimen for direct use by the patient. Support for this is found in the specification at page 1, lines 22-25. Support for direct use by the patient is found in the specification at page 2, lines 14-22 and lines 26-29. Precise amounts of liquids noted and discussion of inhalable agents is taken as inferential support for infer direct use by the individual. The intelligent drug dispensing appliance of the present invention as set forth in claim 22 also includes a drug delivery mechanism responsive to the controller and coupled to the reservoir which is capable of controllably dispensing a pharmaceutical to an individual patient from the reservoir in a precise amount in response to signals from the controller. Support for this found at page 2, lines 26-30. A further component of the intelligent drug dispensing appliance is a data network interface coupled to the controller.

The Liff reference is directed to an automated pharmaceutical delivery system that is uniquely designed for the automated dispensing of *packaged* pharmaceuticals (see column 2, lines 20-40 and drawing figures 3, 5, 6A, 6B, 6C, 13J (reference numerals 399 and 404) 14, 15, 25, 26, 27. It is respectfully submitted that the reference fails to teach or suggest a device capable of administering precise unitized doses of at least one of tablets, liquids, gasses in individual doses to an individual patient according to a treatment regimen for direct use. For this reason, it is submitted that the applicants' invention as set forth in claim 22 is not taught, anticipated, or rendered obvious by the Liff reference.

It is respectfully submitted that the Liff reference is directed to a system which provides a solution for "unit dose dispensing for individual patients". The Liff system is directed to a device which appears to possess the necessary mechanisms to introduce a plurality of doses into a dose container, seal the dose container, and dispense the container to an individual such as patient. The device disclosed in Liff specifically requires the ultimate dispensing of material contained in bottles or containers and lacks the teaching or suggestion of dispensing for direct use or consumption by an individual patient on a unit dose basis as set forth in the Applicants' invention as defined in claim 22. Additionally, it is submitted that the Liff reference fails to teach or suggest

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controllable dispensation of material to an individual patient in a precise amount. For these reasons, it is submitted that the Applicants' invention as set forth in claim 22 is not taught, anticipated, or rendered obvious by the cited reference.

Claims 23-30 currently stands rejected under 35 U.S.C. § 102(e) as being anticipated by Liff. It is submitted that the applicants' invention as set forth in claims 23-30 depend either directly or indirectly from claim 22 to contain all of the limitations found therein. By this dependency, it is submitted that the applicants' invention as set forth in claims 23-30 is not taught, anticipated, or rendered obvious by the Liff reference by the reasons discussed previously in conjunction with claim 22.

Claim 31 currently stands rejected under 35 U.S.C. § 102(e) as being anticipated by Liff. Claim 31 has been amended by this action to more specifically set forth the applicants' invention. The applicants' invention as set forth in claim 31, as amended, is directed to an intelligent drug dispensing system providing replenishment of pharmaceutical medication. The system comprises an intelligent drug dispensing appliance that includes a data network interface, a controller, and a reservoir of pharmaceutical to be dispensed to an individual patient. The pharmaceutical includes at least one of individual tablets, liquids, and gasses to be administered in individual doses according to a treatment regimen for direct use. It is respectfully submitted that the Liff reference fails to teach or suggest a device whereby at least one of individual tablets, liquids, and gasses can be administered in individual doses for direct use by the patient. Thus, it is submitted that the applicants' invention as set forth in claim 31 is not taught, anticipated, or rendered obvious by the Liff reference.

Claim 32 currently stands rejected under 35 U.S.C. § 102(e). Claim 32 has been amended by this action to more specifically define the applicants' invention. Claim 32, as amended, is directed to an intelligent drug dispensing system providing replenishment of pharmaceutical medication. The system includes an intelligent drug dispensing appliance having a data network interface, a controller, and a reservoir of pharmaceutical including at least one of individual tablets, liquids, and gasses, to be administered in individual precise unit doses for direct use by the patient. It is

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respectfully submitted that the Liff device fails to teach or suggest a reservoir of pharmaceutical to be dispensed to a patient which includes at least one of individual tablets, liquids, and gasses to be administered in individual doses for direct use by the patient. For this reason, it is submitted that the applicants' invention as set forth claim 32 is not taught, anticipated or rendered obvious by the Liff reference.

Claims 33-35 also stand rejected under 35 U.S.C. § 102(e) as being anticipated by Liff. The applicants' invention as set forth in claims 33, 34, and 35 depend directly from either claim 31 or claim 32 to contain all of the limitations found therein. By this dependency, it is submitted that the applicants' invention as set forth in claims 33, 34, and 35 is not taught, anticipated, or rendered obvious by the cited references for the reasons discussed previously in conjunction with claims 31 and 32.

Claim 36 stands rejected under 35 U.S.C. § 102(e) as being anticipated by the Liff reference. Claim 36 has been amended by this action to more specifically define the applicants' invention. The applicants' invention as set forth in claim 36, as amended, is directed to an intelligent drug dispensing system providing automatic replenishment of pharmaceuticals which comprises a pharmaceutical replenishment request data server operatively coupled to a data network so as to receive pharmaceutical replenishment request messages from at least one intelligent drug dispensing appliance. The intelligent drug dispensing appliance includes a controller and a reservoir of pharmaceutical to be dispensed over time to a patient in a plurality of discrete doses for direct use by the patient. It is respectfully submitted that the Liff reference fails to teach or suggest the dispensation of pharmaceutical to a patient in a plurality of discrete doses for direct use. Thus, it is submitted that the applicants' invention as set forth in claim 36 is not taught, anticipated, or rendered obvious by the Liff reference.

Claims 37, 38, and 39 also stand rejected under 35 U.S.C. § 102(e) as being anticipated by the Liff reference. Claims 37, 38, and 39 depend from claim 36 to contain all of the limitations found therein. By this dependency, it is submitted that the applicants' invention as set forth in claims 37, 38, and 39 is not taught, anticipated or

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rendered obvious by the Liff reference for the reasons discussed previously in conjunction with claim 36.

Claim 48 currently stands rejected under 35 U.S.C. § 102(e) as being anticipated by Liff. The Examiner indicates that the Liff reference teaches that the pharmaceutical is at least one liquid material and references column 8, lines 16-20. It is respectfully submitted that the Liff reference is directed to a device for dispensing packaged pharmaceuticals. The Liff reference specifically states that the "rack 34 can be modified to provide for a diversity of packages including various box and bottles sizes, end-of-use packaging, liquids, syringes, and various nonprescription products, for example medical supplies." It is respectfully submitted that the Liff reference refers to packaged materials rather than individual doses that are suitable for direct use by a patient such as inhalation doses and the like. For this reason, it is submitted that the applicants' invention as set forth in claim 48 is not taught, anticipated, or rendered obvious by the cited reference.

Claims 50 and 51 currently stand rejected under 35 U.S.C. § 102(e) as being anticipated by Liff. Claims 50 and 51 depend, either directly or indirectly, from claim 22 to contain all of the limitations found therein. By this dependency, it is submitted that the applicants' invention as set forth in claims 50 and 51 is not taught, anticipated, or rendered obvious by the Liff reference for the reasons discussed previously in conjunction with claim 22.

Claim 49 currently stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Liff in view of Monkhouse (US Patent No. 6,514,518 B2). The Examiner indicates that the Liff reference generally discloses the drug dispensing system. Monkhouse is cited as disclosing a drug delivery mechanism including an inkjet printhead capable of delivering precise amounts of liquid. The Examiner indicates that the "binder" discussed in Monkhouse is a liquid binder and therefore should be construed as applicable. It is the Examiner's contention that, at the time of the invention, it would have been obvious to one ordinarily skilled in the art to have coupled the ink printer drug dispensing device of Monkhouse to the network system of Liff. It is

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respectfully submitted that the Monkhouse and Liff references taken together or separately fail to teach or suggest the administration of liquid material from an inkjet printhead in a manner capable of direct ingestion by a patient. It is respectfully submitted that the Liff reference is directed to packaged drug materials. The Monkhouse reference is directed to a solid free form fabrication system. The solid free form fabrication system disclosed in the Monkhouse reference is relatively bulky, cumbersome, and expensive, and, thus, would not be readily employed for use in a device which is capable of dispensing pharmaceuticals for direct use by an individual patient.

Claim 52 currently stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Liff in view of O'Brien. Claim 52 depends directly from claim 51 and includes the limitations previously found in Claims 48, 49, and 22. By this dependency, it is submitted that the applicants' invention as set forth in claim 52 is not taught, anticipated or rendered obvious by the cited references for the reasons discussed previously in conjunction with claim 22.

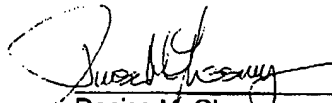
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In summary, claims 22, 30, 31, 32, 36, and 52 have been amended. Discussion has been presented as to why the applicants' invention as set forth in claims 22-38 and 48-52 is not taught, anticipated, or rendered obvious by the cited references. It is respectfully submitted that, in view of these actions, applicants' invention as set forth in claims 22-39 and 48-52 is not taught, anticipated, or rendered obvious by the cited references. It is further submitted that the applicants' invention as set forth in these claims is in condition for allowance. A notice of allowance is, therefore, respectfully requested. In the alternative, entry of this amendment for purposes of appeal is earnestly sought.

Respectfully submitted,



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